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NORTH CENTRAL FOREST EXPERIMENT STATION, FOREST SERVICE—U.S. DEPARTMENT OF AGRICULTURE
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TIMBER VOLUME IN IOWA COUNTIES

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ABSTRACT.--The second forest inventory of Iowa shows timber volume reaching more than 1 billion cubic feet in 1974. Hardwoods make up 99 percent of this total.

OXFORD: 612(777). KEY WORDS: growing stock, sawtimber, hardwoods, softwoods.

Iowa's 1.5 million acres of commercial forest land supported more than 1 billion cubic feet in growing-stock trees in 1974. Included in the total volume of growing stock are 3.5 billion board feet of saw log material.

In addition, volume in live rough and rotten trees (nongrowing stock) is 308 million cubic feet.

Hardwoods completely dominate in Iowa, making up 99 percent of the total growing-stock volume. The oaks, led by white oak and northern red oak, make up almost 40 percent of the total. Other common species groups and their volumes are:

	Million cubic feet
Oaks	403
Maples	148
Elms	95
Cottonwood	92

The State is divided into three geographical units--two in the east and one in the west. The northeastern and southeastern forest survey units contain the major concentrations of timber in the State (fig. 1). The three counties with the most growing-stock in the State are Allamakee, Clayton, and Jackson (table 1), all bordering the Mississippi River.

The sampling error of volume for the survey was $\pm$ 3.96 percent for 1,055 million cubic feet of growing stock in the State. The survey was conducted by the North Central Forest Experiment Station and the Iowa Conservation Commission.

Table 1.--*Net volume of growing stock, sawtimber, and rough and rotten trees on commercial forest land by county, Iowa, 1974*

Survey Unit and county	Growing stock[1]	Sawtimber[2]	Rough and rotten[3]
	Thousand cubic feet	*Thousand board feet*[4]	*Thousand cubic feet*
Northeastern:			
Allamakee	85,128	283,378	28,269
Benton	11,170	37,602	4,268
Black Hawk	6,589	21,055	3,263
Bremer	10,695	37,506	3,778
Buchanan	7,383	23,745	2,990
Butler	5,683	19,557	2,642
Cedar	11,046	36,787	4,237
Chickasaw	6,083	20,654	2,117
Clayton	67,421	230,933	23,129
Clinton	17,187	56,678	7,467
Delaware	13,548	45,508	4,616
Dubuque	27,861	91,541	9,932
Fayette	21,968	74,766	7,245
Floyd	4,799	16,081	1,906
Grundy	379	1,169	188
Howard	5,094	17,285	1,676
Jackson	42,770	141,002	15,737
Johnson	15,075	51,854	5,582
Jones	20,337	66,261	7,745
Linn	21,343	69,850	8,379
Mitchell	3,821	13,692	1,288
Scott	7,292	24,284	3,136
Tama	14,875	50,692	5,579
Winneshiek	32,460	108,284	10,715
Total	460,007	1,540,164	165,884
Southeastern:			
Appanoose	16,092	50,925	4,219
Boone	13,170	44,573	2,940
Clarke	12,793	37,171	3,651
Dallas	13,277	44,109	2,926
Davis	16,707	52,222	4,390
Decatur	16,664	50,691	4,814
Des Moines	18,156	59,100	4,301
Guthrie	17,990	59,823	4,013
Hamilton	4,344	14,578	1,050
Hardin	6,412	20,846	1,464
Henry	13,606	41,337	3,519
Iowa	14,799	50,811	3,146
Jasper	8,819	30,483	1,936
Jefferson	12,166	39,385	2,917
Keokuk	12,227	40,642	2,628
Lee	32,950	101,413	8,127
Louisa	19,984	70,708	4,052
Lucas	19,873	62,011	4,883
Madison	16,529	52,500	4,314
Mahaska	12,637	43,064	2,648
Marion	10,945	34,993	2,992
Marshall	6,739	23,790	1,326
Monroe	22,009	68,379	5,579
Muscatine	14,633	49,747	3,164
Polk	7,525	26,300	1,849
Poweshiek	5,346	18,060	1,197
Story	4,151	14,058	874
Van Buren	22,760	71,624	6,036
Wapello	16,327	53,133	3,789
Warren	15,597	51,645	3,828
Washington	13,760	45,317	3,040
Wayne	9,830	31,234	2,436
Webster	12,920	42,888	2,845
Total	461,737	1,497,560	110,893

(Table 1 continued on next page)

(Table 1 continued)

Survey Unit and county	Growing stock[1]	Sawtimber[2]	Rough and rotten[3]
	Thousand cubic feet	*Thousand board feet*[4]	*Thousand cubic feet*
Western:			
Adair	3,304	10,242	844
Adams	4,975	17,765	1,072
Audubon	541	1,601	165
Buena Vista	1,103	3,220	258
Calhoun	640	3,020	77
Carroll	634	2,770	81
Cass	1,636	6,039	393
Cerro Gordo	602	2,368	60
Cherokee	2,342	7,789	593
Clay	2,521	9,176	527
Crawford	2,445	7,381	601
Dickinson	111	211	66
Emmet	1,441	5,443	339
Franklin	2,320	9,224	403
Fremont	7,231	23,025	1,838
Greene	4,619	17,756	887
Hancock	211	542	86
Harrison	15,936	50,579	3,982
Humboldt	1,607	5,742	307
Ida	531	2,470	42
Kossuth	2,480	10,403	372
Lyon	1,118	4,017	224
Mills	7,331	24,308	1,773
Monona	12,006	37,022	3,170
Montgomery	3,007	10,970	620
O'Brien	911	3,776	168
Osceola	89	327	23
Page	4,438	14,591	1,005
Palo Alto	1,159	4,236	215
Plymouth	3,150	10,935	716
Pocahontas	436	1,035	105
Potawattamie	7,716	25,554	1,849
Ringgold	8,180	26,588	2,023
Sac	1,025	4,117	219
Shelby	1,231	4,806	254
Sioux	723	3,149	102
Taylor	5,718	19,164	1,381
Union	7,304	23,263	1,782
Winnebago	67	120	23
Woodbury	7,690	25,277	1,857
Worth	593	1,858	175
Wright	1,804	6,813	384
Total	132,926	448,692	31,061
State total	1,054,670	3,486,416	307,838

[1]The volume of sound wood in the bole of growing-stock trees 5.0 inches d.b.h. and larger, from a 1-foot stump to a minimum of 4.0-inch top diameter outside bark, or to the point where the central stem breaks into limbs. Growing-stock volumes are shown in cubic feet.

[2]Net volume of the saw log portion of live sawtimber trees (softwoods 9.0 inches d.b.h. and larger and hardwoods 11.0 inches d.b.h. and larger) from stump to a minimum 7 inches top diameter outside bark for softwoods and 9 inches for hardwoods.

[3]Net volume of live trees 5.0 inches d.b.h. and larger that do not contain at least one merchantable 12-foot saw log or two noncontiguous 8-foot or longer saw logs, now or prospectively, because of roughness and poor form or because of rot (that is, when more than 50 percent of the cull volume of the tree is rotten).

[4]International 1/4-inch rule.

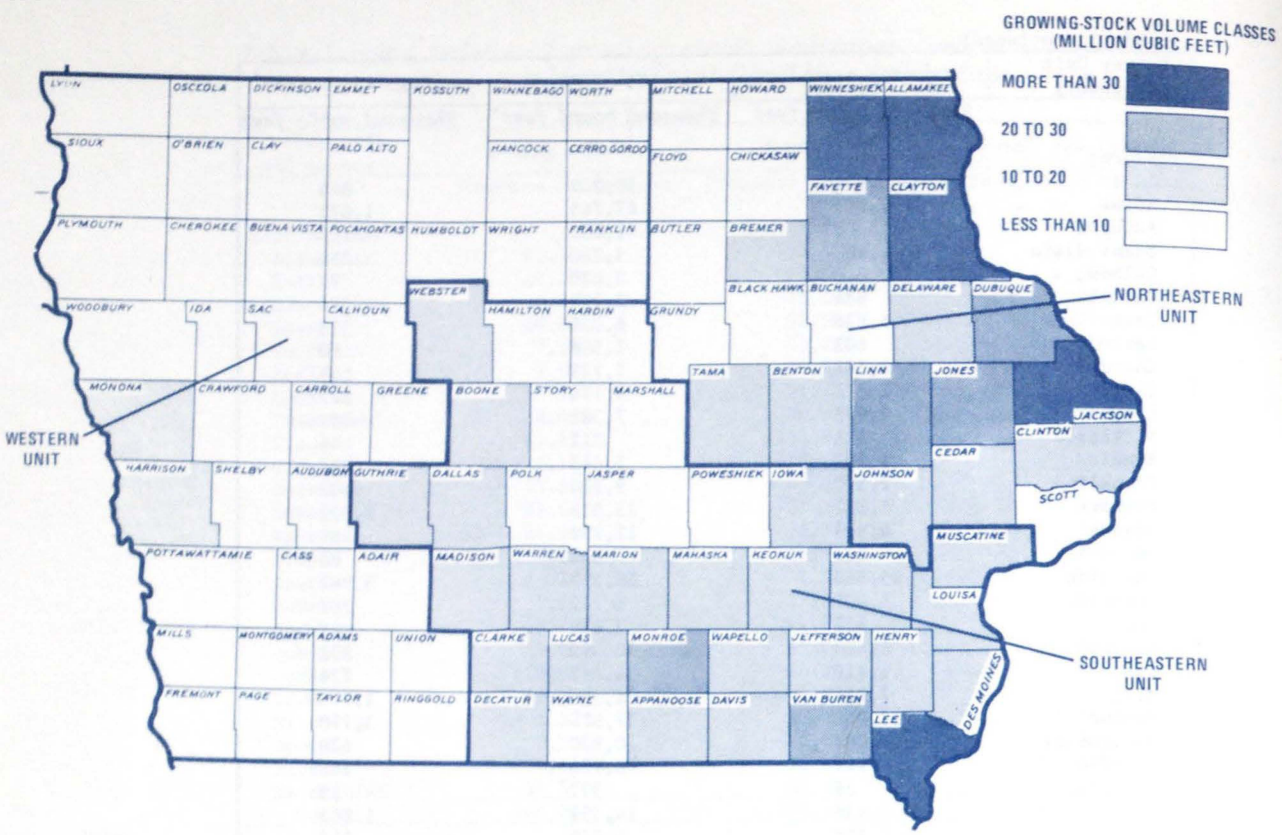

Figure 1.--*Growing-stock volume in Iowa counties, 1974.*

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